

2019 NPCR LOUISIANA SUCCESS STORY

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Registry Data as the Foundation of Taking Aim at Cancer in Louisiana (TACL)

NATIONAL PROGRAM OF CANCER REGISTRIES SUCCESS STORY

SUMMARY: In 2018, the Louisiana Department of Health (LDH) launched an initiative called Taking Aim at Cancer in Louisiana (TACL). The Louisiana Tumor Registry (LTR) closely collaborated with LDH to use cancer registry data to determine the focus of this initiative: increasing colorectal cancer (CRC) screening and increasing adherence to national guidelines for breast cancer treatment. The goals for each focus area were determined based on LTR data, which will also assess the effectiveness of TACL interventions. Cancer registry information is the foundation of the cancer control continuum. Without complete, high-quality, and timely cancer data from LTR, a strong footing for this initiative would be absent. This is an excellent example of the registry world and the cancer control world working together to improve cancer outcomes.

CHALLENGE: Louisiana ranks 7th in the United States for both cancer incidence and mortality based on 2012-2016 data (<https://gis.cdc.gov/Cancer/USCS/DataViz.html>). Thus, much room for improvement in cancer screening, diagnosis, treatment, and survivorship remain. Identifying the root of these problems is a challenge. Our thorough analysis of LTR data painted a true picture of the cancer landscape, pinpointing target areas for the TACL initiative.

The TACL Initiative developed from a Statewide Cancer Strategy Landscape Analysis, which utilized LTR data to assess the following questions:

1. What are Louisiana's cancer outcomes?
2. How does access to care impact Louisiana's cancer outcomes?
3. How do diagnoses, care patterns and outcomes vary by cancer type?
4. Where do Louisianans receive cancer care today?
5. How does quality and cost of cancer care vary across Louisiana?
6. What existing assets can Louisiana build on to improve cancer outcomes?

After reviewing preliminary data, it became clear that the first goals would be focused on CRC and breast cancer, as Louisiana ranks 3rd for breast cancer mortality and 4th for CRC mortality (<https://gis.cdc.gov/Cancer/USCS/DataViz.html>) in the United States. Given that these cancers are highly treatable and preventable (in the case of CRC), room for improvement exists.

SOLUTION: By mining the LTR data on breast cancer and CRC, large disparities were apparent for these cancers between black and white Louisianans for incidence, mortality, and stage at diagnosis. Additionally, Louisiana fell below national averages for screening and adherence to guideline-concordant care. Thus, the need for a statewide initiative to bring together stakeholders from all health sectors in Louisiana drove the TACL initiative with a vision: *To improve cancer outcomes in Louisiana by expanding residents' access to cancer prevention, screening and standard of care treatment.*

Improving outcomes usually involves increases in healthcare expenses, thus presenting a barrier for those who are uninsured or under-insured. However, with Medicaid expansion in Louisiana in 2016, an opportunity for more people to receive the necessary care to improve outcomes arose (Louisiana Comprehensive Cancer Control Plan 2017-2021).

To effectively achieve the TACL aims in the target areas, TACL established a Steering Committee, and three sub-committees (Clinical, Policy, and Data & Reporting); members included individuals from hospital systems, state government, payer systems, research institutions, cancer control organizations, and community-based organizations.

To further invest in the initiative, the Director the LTR agreed to chair the Data Committee, and the liaison participated as a committee member. This allowed TACL to capitalize on the wealth of information in the cancer registry database, as well as provided an opportunity to LTR to fulfill part of its mission: *To collect and report complete, high-quality, and timely population-based cancer data in Louisiana to support cancer research, control, and prevention.*

RESULTS: The following aims for both CRC and breast cancer emerged from detailed analyses of existing cancer registry data.

Colorectal Cancer:

Aims:

1. Increase % of adults aged 50-75 being screened for CRC through evidence-based screening methods.
2. Reduce current racial and geographic disparities in the screening for CRC.
3. Reduce current racial and geographic disparities in the initiation of treatment for CRC patients.
4. Reduce mortality rate in adults diagnosed 50-75 with CRC.

In order to address each of the aims listed above, national averages or national standards were identified to set reasonable and achievable goals for Louisiana.

Given that Aims 1 and 2 focus on improving screening for CRC, which is not collected by state cancer registries, we plan to evaluate improvement through shifts in stage at diagnosis for these two aims.

To assess Aim 3, the Clinical Committee identified national guidelines from the National Cancer Care Network (NCCN) for benchmarks. Both of the guidelines were assessed by race and by region in the state to identify racial and geographic disparities.

For Aim 4, mortality rates from 2007 through 2016 were reviewed to determine a reasonable, yet challenging, goal for 2024. The CRC mortality rate in 2007 for those diagnosed after age 50 was 66.9 per 100,000; in 2016, this had fallen to 51.8 per 100,000. On average the mortality rate decreased by

CRC Aim 3: Reduce current racial and geographic disparities in the initiation of treatment for CRC patients in Louisiana.							
NCCN Measures	Racial Disparities				Regional Disparities		
	2014-2016 data				2014-2016 data		
	White	Black	Difference	2024 Goal	Lowest	Highest	2024 Goal
% of stage III CRC cases with chemotherapy within 120 days*	93.3	90.7	2.6	<1 percentage point difference	84.3	96.4	>90% for all regions
% of stage III CRC cases with 12+ lymph nodes examined*	83.8	81.9	1.9	<1 percentage point difference	71.5	89.1	>80% for all regions

*Age at diagnosis <80 years
Source: Louisiana Tumor Registry

1.67 each year. If this trend were to continue, we would expect this rate to decrease by 8.39 points (a 16% reduction) in 5 years. However, with the TACL initiative at the forefront, we would hope to see even more improvement over the next five years, thus our goal is to reduce CRC mortality for those diagnosed over age 50 by 20% (to 41.4 per 100,000).

Breast Cancer:

Aims:

1. Increase adherence to evidence-based treatment protocol for breast cancer treatment.
2. Reduce racial and geographic disparities in late-stage breast cancer diagnosis.
3. Reduce mortality from breast cancer.

We plan to utilize guidelines from NCCN for breast cancer treatment to develop a baseline for protocol adherence and establish attainable yet challenging goals for Aim 1.

For Aim 2, we assessed the percentage of late-stage female breast cancer diagnosed between ages 40-64 by race in order to set our 5-year goals for both racial and geographical disparities.

Breast Aim 2: Reduce racial and geographic disparities in late-stage breast cancer diagnosis in Louisiana.							
	Racial Disparities				Regional Disparities		
	2016 data				2016 data		
	White	Black	Difference	2024 Goal	Lowest	Highest	2024 Goal
% of late-stage female breast cancer diagnosed between ages 40-64	29.3	35.1	5.8	<2 percentage point difference	27.9	35.1	>30% for all regions

Source: Louisiana Tumor Registry

For Aim 3, mortality rates from 2007 through 2016 were reviewed to determine a reasonable, yet challenging, goal for 2024. The breast cancer mortality rate in 2007 for those diagnosed after age 40 was 53.8 per 100,000; in 2016, this had fallen to 49.2 per 100,000. On average the mortality rate decreased by 0.5 each year. If this trend were to continue, we would expect this rate to decrease by 2.5 points (a 5% reduction) in 5 years. However, with the TACL initiative at the forefront, we would hope to see even more improvement over the next five years, thus our goal is to reduce breast cancer mortality for those diagnosed over age 40 by 10% (to 44.3 per 100,000).

SUSTAINING SUCCESS: This initiative, TACL, and the collaboration between TACL and the LTR is in its infancy. A tremendous amount of work lies ahead to ultimately reach the goals outlined above and produce measurable results for Louisiana. Through the next five years, cancer registry data will be monitored and assessed to ultimately, and hopefully, measure improvement for Louisiana for each aim. Given the complexity of these goals, adjustments will be made when needed to maintain feasibility and relevance. To attain these goals, action from all sectors involved in this initiative will be essential.

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